

PROCESS FOR MANUFACTURING HIGH PURITY XYLOSE

ABSTRACT OF THE DISCLOSURE

A process for manufacturing xylose by extracting hemicellulose from a cellulosic material, such as by a cold caustic extraction method, concentrating the extract, such as
5 by nanofiltration, into a hemicaustic stream containing hemicellulose with greater than about 85 wt% xylan content, and subsequently hydrolysing the xylan from the hemicaustic stream to xylose. The high concentration of xylan within the concentrated hemicaustic stream enables hydrolyzation of the xylan to food-grade xylose and, optionally, hydrogenation of the xylose to xylitol without the need of a chromatographic
10 separation step as previously required.

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